WHAT IS CLAIMED IS:

1. A light source for examination of a substance which emits light at a wavelength greater than a wavelength of light emitted from the light source when the substance is excited by the wavelength of light emitted from the light source, the light source comprising:

a housing having a light outlet; and

a low-voltage lamp positioned in the housing and oriented to emit light through the light outlet, wherein the lamp is capable of being connected to a source of electrical power,

wherein the low-voltage lamp emits light of a wavelength within a predetermined range effective to enhance the detection of emission of light from a substance when the substance is excited by the wavelength of light emitted from the lamp.

2. The light source of claim 1, wherein the low-voltage lamp is a low heat generating lamp.

3. The light source of claim 1, wherein the low-voltage lamp is a light emitting diode.

4. The light source of claim 3, wherein the light emitting diode is a non-diffused type light emitting diode.

5. The light source of claim 3, wherein the light emitting diode is a diffused type light emitting diode.

6. The light source of claim 1, wherein the housing includes a reflector, the lamp being between the reflector and the light outlet.

7. The light source of claim 6, wherein the reflector is a parabolic reflector.

5.

8. The light source of claim 1, wherein the low-voltage lamp emits light primarily in the blue wavelength range.

6.

9. The light source of claim 1, wherein the low-voltage lamp emits light primarily in the ultraviolet wavelength range.

7.

10. The light source of claim 1, wherein the wavelengths of light emitted from the lamp is substantially between 300 and 500 nanometers.

11. The light source of claim 1, wherein the source of electrical power is a battery.

12. The light source of claim 1, further including a filter lens mounted on the housing.

13. The light source of claim 1, wherein the filter lens is a dichroic filter.

14. A light source for examination of a substance which emits light at a wavelength greater than a wavelength of light emitted from the light source when the substance is excited by the wavelength of light emitted from the light source, the light source comprising:

a housing having a light outlet; and

a low heat generating lamp positioned in the housing and oriented to emit light through the light outlet, wherein the lamp is capable of being connected to a source of electrical power,

wherein the low heat generating lamp emits light of a wavelength within a predetermined range effective to enhance the detection of emission of light from a substance when the substance is excited by the wavelength of light emitted from the lamp.

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15. The light source of claim 14, wherein the low heat generating lamp is a low-voltage lamp.

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16. The light source of claim 14, wherein the low heat generating lamp is a light emitting diode.

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17. The light source of claim 14, wherein the low-voltage lamp emits light primarily in the blue wavelength range.

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18. The light source of claim 14, wherein the low-voltage lamp emits light primarily in the ultraviolet wavelength range.

19. The light source of claim 14, wherein the source of electrical power includes a battery.

20. A method of detecting a leak in a system containing a substance capable of emitting an emission wavelength of light after being excited by an excitation wavelength of light, the method comprising:

providing light within a predetermined wavelength range from a light source to a leak site, the light emitted from a low-voltage lamp, wherein the lamp is capable of being connected to a source of electrical power; and

detecting emission of light from the substance.

add B4 > Add C6